Department of Energy
National Nuclear Security Administration
Pantex Site Office
P. O. Box 30030
Amarillo, TX 79120

FEB 10 2006

MEMORANDUM FOR: Ted Wyka, NNSA HQ, NA-1

FROM: Daniel E. Glenn, Manager

SUBJECT: Annual Workforce Analysis and Staffing Plan Report

REFERENCE: Memorandum Schepens/Distribution, Annual Workforce Analysis and Staffing Plan Report, October 28, 2005

Attached please find the annual staffing analysis report for the Pantex Site Office that was requested by the referenced memorandum. It is my expectation you will determine whether to provide the information to Mr. Schepens.

The analysis shows a shortage of nine people for positions covered under the Technical Qualification Program (TQP). I expect to hire one facility representative this fiscal year to reduce the shortage to eight. Based on recent decisions by NNSA regarding Site Office Full Time Employee allotments, it is unlikely any additional personnel will be hired for TQP positions in the foreseeable future. As a result, there is nothing to be gained by providing the analysis and status reports specified by Corrective Action 1 of the Department's Deliverable for Commitment 13 to the implementation plan prepared in response to DNFSB Recommendation 2004-1. In that regard, I do not intend to provide any further information on this subject unless directed by NNSA.

Questions in regard to this matter should be referred to Karl Waltzer at 806-477-3148.

Attachment:

cc w/attachment:

F. Russo, NA-1, (Fors)
D. White, PXSO, 12-36A
J. Johnson, PXSO, 12-36A
M. Padilla, PXSO, 12-36A
G. Wisdom, PXSO, 12-36A
S. Erhart, PXSO, 12-36A
K. Waltzer, PXSO, 12-36A
J. Kirby, PXSO, 12-36A
E. Demerson, PXSO, 12-36A
D. Rhodes, GenQuest, 12-36A

Annual Workforce Analysis and Staffing Plan Report
As of December 31, 2005
Reporting Office: Pantex Site Office

Section One: Current Mission(s) of the Organization and Potential Changes

The primary mission of the Pantex Site Office is to provide on-site management, day-to-day oversight and surveillance of the Pantex Plant Contractor's operations and support for accomplishment of DOE, NNSA's strategic and long term goals.

- Eleven main facilities for nuclear explosive operations
- One main facility for nuclear material operations
- Nuclear explosive and nuclear material staging facilities
- High explosive formulation, fabrication and machining facilities

Operations are expected to be largely unchanged.

Section Two: Technical Staffing

See attached enclosures 1, 2, 3 and 4 for STSM, FR, SSO, and Other TQP staffing analyses.

Number of Hazard Category 1, 2, or 3 Nuclear Facilities:

HC 1: None HC 2: See FR Staffing Analysis HC 3: None

Number of Radiological Facilities: See FR/SSO Staffing Analysis

Number of High or Moderate Hazard Non-Nuclear Facilities: See FR/SSO Staffing Analysis

Number of Low Hazard Non-Nuclear Facilities: See FR/SSO Staffing Analysis

Number of Documented Safety Analyses: Site-wide, Facility Specific, & per Weapons Program

Number of Safety Systems[2]: See SSO Staffing Analysis

Number of Site Contractor FTEs: Approximately 3200

Number of Federal Office FTEs: 83

In the following Technical Staffing Summary Table, the electrical, mechanical, maintenance, I&C, fire protection, civil/structural functions are included in the responsibilities of the safety system oversight personnel.

TECHNICAL STAFFING [1] Technical Staffing Summary Table (see Notes below)					
TECHNICAL CAPABILITY	For All Hazardous Facilities[1]		For Defense Nuclear Facilities[2]		Comments
	Number of FTEs Needed[1]	Number of FTEs Onboard[1]	Number of FTEs Needed [2]	Number of FTEs Onboard[2]	
Senior Technical Safety Managers	6	6	6	6	
Safety System Oversight Personnel[3]	5	4	5	4	
Facility Representatives[4]	10	7	10	7	
Other Technical Capabilities:[5]					
Aviation Safety Manager	N/A	N/A	N/A	N/A	
Aviation Safety Officer	N/A	N/A	N/A	N/A	
Chemical Processing	N/A	N/A	N/A	N/A	
Civil/Structural Engineering	See Comments	See Comments	See Comments	See Comments	See "SSO" Analysis
Construction Mgmt	4	4	4	4	
Criticality Safety	0.1	0.1	0.1	0.1	
Deactivation and Decommissioning	N/A	N/A	N/A	N/A	
Electrical Systems	See Comments	See Comments	See Comments	See Comments	See "SSO" Analysis
Emergency Management	1	1	1	1	
Environmental Compliance	3	3	3	3	
Environmental Restoration	1	1	1	1	
Facility Maintenance Mgmt	See Comments	See Comments	See Comments	See Comments	See "SSO" Analysis
Fire Protection Engineering	See Comments	See Comments	See Comments	See Comments	See "SSO" Analysis
Industrial Hygiene	1	1	1	1	
Instrumentation and Control	See Comments	See Comments	See Comments	See Comments	See "SSO" Analysis
Mechanical Systems	See Comments	See Comments	See Comments	See Comments	See "SSO" Analysis
Nuclear Explosive Safety	2	2	2	2	
Nuclear Safety Specialist	8	5	8	5	
Occupational Safety	2	1	1	1	
Quality Assurance	6	6	6	6	
Radiation Protection	1	1	1	1	
Safeguards and Security	9	9	9	9	
Safety Software Quality Assurance	0.2	0.2	0.2	0.2	
Technical Program Manager	12	11	12	11	
Technical Training	1	0	1	0	
Transportation & Traffic Mgmt	1	1	1	1	
Waste Management	1	1	1	1	

Notes:

1. These columns are the number of FTEs needed to perform the Federal Safety Assurance function for all hazardous facilities, including defense and non-defense nuclear facilities, radiological facilities, and other hazardous facilities. The Federal Safety Assurance function is described in the DOE *Implementation Plan to Improve Oversight of Nuclear Operations* (in response to Defense Nuclear Facilities Safety Board Recommendation 2004-1).
2. These columns apply only to defense nuclear facilities, and are a subset of the previous columns. These positions are

being specified in order to report the status of shortages and any actions taken to fill them to the DNFSB in December 2006 under Commitment 15 in the DOE 2004-1 IP.

3. SSO staffing analysis worksheets can be found at http://www.ftcp.org.
4. Facility Representative staffing analysis worksheets can be found at http://www.ftcp.org.
5. Any additional required technical capabilities should be added to this list. No listed technical capabilities should be deleted.

Section Three: Current shortages and plans for filling them

Facility Representatives: One FRposition is currently being filled to restore the PXSO total to eight. PXSO has authorization to hire two more FR's to bring the total to the staffing analysis recommended strength of ten. It is expected those additional FR's will be hired in CY06.

Safety System Oversight: The current staffing level of four is being augmented through the use of the Service Center and other resources to perform assessments in some areas e.g., special tooling. There is currently no authorization to add FTE's to this functional area although PXSO will continue to seek that authorization through the NNSA Leadership Coalition.

Safety Systems Specialist: These personnel perform the DSA review activity at PXSO in addition to collateral duties of criticality safety and SQA. Current staffing is augmented through the use of the Service Center and support service contractors for DSA reviews. Assuming that support remains available for the next two years, it is expected the DSA review workload will be reduced as SS21 projects complete and the remaining new TSR controls are implemented. PXSO may pursue one to two FTE's to reduce dependency on the Service Center since that avenue tends to be less efficient than onsite staff.

Occupational Safety: With the advent of 10CFR851 itis expected OHA oversight requirements will increase. The FTE levels for all hazardous facilities have been increased to "two" to reflect the work associated with the new Rule. PXSO will continue to seek that authorization through the NNSA Leadership Coalition.

Technical Program Manager: The staffing results reflect a current vacancy that is expected to be filled in CY06.

Training: The training FTE has been requested in the past. The position will be requested again in CY06.

Section Four: Projected shortage/surplus over next five years

These are no significant changes to the plant mission that would substantially change the staffing requirements expected over the next five years at this time. Retirements are expected to occur over the next five years and will be backfilled using normal hiring practices. FTE needs will not reduce in the event of attrition. It is not expected attrition would result in the loss of any FTE allocations.

Section Five: General concerns or recommendations related to the Technical Staffing

None

Pantex Site Office Senior Technical Safety Manager (STSM) Staffing

The Pantex Site Office has identified the following positions as STSM based on the criteria of the FTCP manual and the function areas of responsibility in regard to operation of defense nuclear facilities. See attached organization chart.

Title	Function
Manager	Overall safety responsibility for nuclear explosive and nuclear material operations.
Senior Science and Technical Advisor	Provides advice to Manager and Assistant Managers for safety issues related to nuclear explosive and nuclear material operations.
Assistant Manager for Nuclear Engineering	Review and approval of safety basis documents, the USQ program and safety system oversight for nuclear explosive and nuclear material operations. Provides nuclear explosives safety oversight.
Assistant Manager for Operations	Oversight of program activities related to the safe operation of nuclear explosive and nuclear material facilities.
Assistant Manager for Environmental and Site Engineering Programs	Oversight of design and construction activities and environmental compliance activities related to the safe operation of nuclear explosive and nuclear material facilities.
Assistant Manager for Oversight and Assessment	Facility representative program, quality assurance, and safety management programs relevant to the safe operation of nuclear explosive and nuclear facilities.

Table 1 - Facility Representative Staffing (Tables 2 & 3 from FR Staffing Template)

	Determination of Facility Coverage Ranking Priority							Determination of Facility Representative Coverage			
Facility or Groups of Facilities	Facility Hazard Value	Facility Size	Material Condition	Operations Complexity	Programmatic Importance	Operational Rigor	Coverage Ranking Priority	Facility Categorization	Facility Activity Level	Base Coverage Level	Adjusted Coverage Level
a	b	c	d	e	f	g	h	i	j	k	l
Bldg. 12-44	19	0.75	1	0.75	0.75	1	8	N2	H	F	F
Bldg. 12-85	19	0.75	0.75	0.75	0.75	1	6	N2	H	F	F
Bldg. 12-96	19	0.75	0.75	0.75	0.75	1	6	N2	H	F	F
Bldg. 12-98	19	0.75	0.75	0.75	0.75	1	6	N2	H	F	F
Bldg. 12-84	18	0.75	1	0.75	0.75	1	8	N2	H	F	F
Bldg. 12-99	18	0.75	0.75	0.75	0.75	1	6	N2	H	F	F
Bldg.12-104	18	0.75	0.75	0.75	0.75	1	6	N2	H	F	F
Z-4 SNM	15	1	1	0.75	0.75	1	8	N2	H	F	F
Bldg. 12-50	14	0.75	1	0.75	0.75	1	6	N2	L	O	O
Bldg. 12-60	14	0.75	1	0.75	0.75	1	6	N2	M	F	F
Bldg. 12-64	13	0.75	1	0.75	0.75	1	5	N2	H	F	F
Bldg. 11-51	10	0.75	1	0.75	0.75	1	4	E2	M	I	I
FS	10	0.75	1	0.75	0.75	1	4	E2	M	O	O
Bldg. 12-121	4	0.75	0.75	0.75	0.75	1	1	E3	H	F	F
Bldg. 11-55	8	0.75	1	0.75	0.75	1	3	E2	M	I	I
Bldg. 12-19E	8	0.75	1	0.75	0.75	1	3	E2	M	O	O
Bldg. 12-116	8	0.75	0.75	0.75	0.75	1	3	N2	H	F	F
BG	8	0.75	1	0.75	0.75	1	3	E2	M	O	O
Bldg. 12-58	7	0.75	1	0.75	0.75	1	3	N2	M	I	O
Bldg. 12-66	7	0.75	1	0.75	0.75	1	3	N2	M	1	I
Bldg. 12-86	5	0.75	0.75	0.75	0.75	1	2	E2	H	F	F
Bldg. 11-38	5	0.75	1	0.75	0.75	1	2	E2	L	S	S
Bldg. 12-62	5	0.75	1	0.75	0.75	1	2	E2	L	S	S

Table 1 - Facility Representative Staffing (Tables 2 & 3 from FR Staffing Template)

	Determination of Facility Coverage Ranking Priority							Determination of Facility Representative Coverage			
Facility or Groups of Facilities	Facility Hazard Value	Facility Size	Material Condition	Operations Complexity	Programmatic Importance	Operational Rigor	Coverage Ranking Priority	Facility Categorization	Facility Activity Level	Base Coverage Level	Adjusted Coverage Level
a	b	c	d	e	f	g	h	i	j	k	l
Bldg. 12-17	5	0.75	1	0.75	0.75	1	2	E4	M	O	O
2-104A Paint B	5	0.75	0.75	0.75	0.75	1	2	N2	L	O	O
Bldg. 11-20	5	0.75	1	0.75	0.75	1	2	E2	M	O	O
Bldg. 12-21	4	0.75	1	0.75	0.75	1	2	E2	L	S	S
Bldg. 12-63	4	0.75	1	0.75	0.75	1	2	E2	M	O	O
Bldg. 12-31	4	0.75	1	0.75	0.75	1	2	E2	M	O	O
Bldg. 11-50	3	0.75	1	0.75	0.75	1	1	E2	L	S	S
12-65/83	3	0.75	1	0.75	0.75	1	1	E2	L	S	S
12-104-A	3	0.75	0.75	0.75	0.75	1	1	E2	L	O	O
Bldg. 12-79	2	0.75	1	0.75	0.75	1	1	E3	L	S	S
Bldg. 11-15	2	0.75	1	0.75	0.75	1	1	E2	L	S	S
Bldg. 11-37	2	0.75	1	0.75	0.75	1	1	E2	L	S	S
Bldg. 12-19W	2	0.75	1	0.75	0.75	1	1	E2	L	O	O
Bldg. 12-26	2	0.75	1	0.75	0.75	1	1	E2	L	S	S
12-55/56	2	0.75	1	0.75	0.75	1	1	E2	L	S	S
Bldg. 12-42	1	0.75	1	0.75	0.75	1	0	N2	L	S	S
Bldg. 12-82	1	0.75	1	0.75	0.75	1	0	E3	M	S	S
HPFL	1	0.75	1	0.75	0.75	1	0	Safety Class	N/A	O	O
12-32/33	1	0.75	1	0.75	0.75	1	0	E4	L	S	S
Bldg. 12-44 Cell 8	0	0.75	1	0.75	0.75	1	0	N2	L	O	O
12-21	0	0.75	1	0.75	0.75	1	1	E2	M	O	O
12-53/52	0	0.75	1	0.75	0.75	1	0	E4	L	S	S
Total											

Table 2 - Facility Hazard Value (Table 1 from FR Staffing Template)

Facility or Groups of Facilities	Radiation Exposure			Criticality			Biological			Hazardous Chemicals			Lasers			Electricity			Cryogens			High Pressure			Hoisting & Rigging			Construction or D&D			Explosives			Fire			Facility Hazard Value
	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	
Bldg. 12-44	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	3	1	2	2	1	19
Bldg. 12-85	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	3	1	1	2	1	19
Bldg. 12-96	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	3	1	1	2	1	19
Bldg. 12-98	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	3	1	1	2	1	19
Bldg. 12-99	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	18
Bldg.12-104	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	18
Bldg. 12-84	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	18
Bldg. 12-44 Cell 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bldg. 12-64	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	2	1	13
Bldg. 12-50	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	14
Bldg. 12-60	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	14
Z-4 SNM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	2	1	2	2	2	15
Bldg. 12-121	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	1	2	1	9
Bldg. 11-51	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	10
Bldg. 12-116	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	1	9
Bldg. 11-55	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	8
Bldg. 12-19E	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	8
Bldg. 12-58	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	1	7
Bldg. 12-66	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	1	7
FS	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	1	2	1	10
Bldg. 12-86	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	5

Table 2 - Facility Hazard Value (Table 1 from FR Staffing Template)

Facility or Groups of Facilities	Radiation Exposure			Criticality			Biological			Hazardous Chemicals			Lasers			Electricity			Cryogens			High Pressure			Hoisting & Rigging			Constructio n or D&D			Explosives			Fire			Facility Hazard Value
	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	
BG	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	2	2	8
Bldg. 12-17	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	5
Bldg. 11-38	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	5
Bldg. 12-62	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	1	0	5
Bldg. 12-63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	1	0	4
Bldg. 12-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	1	0	4
Bldg. 12-21	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	4
Bldg. 11-20	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	5
Bldg. 11-50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	3
12-65/83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	3
12-104-A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3
Bldg. 12-79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2
Bldg. 11-15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Bldg. 11-37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Bldg. 12-19W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Bldg. 12-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
12-55/56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
12-32/33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Bldg. 12-82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
HPFL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bldg. 12-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 2 - Facility Hazard Value (Table 1 from FR Staffing Template)

Facility or Groups of Facilities	Radiation Exposure			Criticality			Biological			Hazardous Chemicals			Lasers			Electricity			Cryogens			High Pressure			Hoisting & Rigging			Constructio n or D&D			Explosives			Fire			Facility Hazard Value
	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	
12-53/52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-104A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	0	5
Bldg. 11-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	2	0	1	0	6

Table 3 - Facility Representative Available Time for Coverage, Generic Analysis (Table 5 from FR Staffing Template)

FR Activity that does not provide oversight of his/her assigned facility or increases facility oversight time*	Average Time required to perform identified activity across the FR Program being analyzed	Hours required to perform identified activity annually
Annual Leave	6 hours per pay period	-156
Sick Leave	1 week per year	-40
Administrative Duties	10% of time	-208
Training	3 weeks per year	-120
Collateral Duties	3 hours per week at work	-132
Special Assignments	1 week	-40
Overtime	10%	208
Available Time Adjustment		-488
Percentage of Time Available to Provide FR Coverage (2080 - Avail Time Adjustment / 2080)		0.77
Staff Required to meet FR coverage required on Table 1 and additional activities identified on this table (FTE Required from Table 1 / Percentage of time Available)		7.8/0.77=10.1 FTE

This assumes that oversight of maintenance activities in nuclear facilities is rolled into normal FR coverage.

* Activities that reduce FR coverage are negative. Activities that increase FR coverage (overtime, staff detailed to provide backup oversight, etc.) are positive.

Table 1 - SSO Staffing

	Determination of Facility Coverage Ranking Priority							Determination of SSO Coverage			
Facility or Groups of Facilities	Facility Hazard Value	Facility Size	Material Condition	Operations Complexity	Programmatic Importance	Operational Rigor	Coverage Ranking Priority	Facility Categorization	Facility Activity Level	Base Coverage Level	Adjusted Coverage Level
a	b	c	d	e	f	g	h	i	j	k	l
Bldg. 12-44	19	0.75	1	0.75	0.75	1	8	N2	H	F	F
Bldg. 12-85	19	0.75	0.75	0.75	0.75	1	6	N2	H	F	F
Bldg. 12-96	19	0.75	0.75	0.75	0.75	1	6	N2	H	F	F
Bldg. 12-98	19	0.75	0.75	0.75	0.75	1	6	N2	H	F	F
Bldg. 12-84	18	0.75	1	0.75	0.75	1	8	N2	H	F	F
Bldg. 12-99	18	0.75	0.75	0.75	0.75	1	6	N2	H	F	F
Bldg.12-104	18	0.75	0.75	0.75	0.75	1	6	N2	H	F	F
Z-4 SNM	15	1	1	0.75	0.75	1	8	N2	H	F	F
Bldg. 12-50	14	0.75	1	0.75	0.75	1	6	N2	L	O	O
Bldg. 12-60	14	0.75	1	0.75	0.75	1	6	N2	M	F	F
Bldg. 12-64	13	0.75	1	0.75	0.75	1	5	N2	H	F	F
Bldg. 11-51	10	0.75	1	0.75	0.75	1	4	E2	M	I	I
FS	10	0.75	1	0.75	0.75	1	4	E2	M	O	O
Bldg. 12-121	4	0.75	0.75	0.75	0.75	1	1	E3	H	F	F
Bldg. 11-55	8	0.75	1	0.75	0.75	1	3	E2	M	I	I
Bldg. 12-19E	8	0.75	1	0.75	0.75	1	3	E2	M	O	O
Bldg. 12-116	8	0.75	0.75	0.75	0.75	1	3	N2	H	F	F
BG	8	0.75	1	0.75	0.75	1	3	E2	M	O	O
Bldg. 12-58	7	0.75	1	0.75	0.75	1	3	N2	M	I	O
Bldg. 12-66	7	0.75	1	0.75	0.75	1	3	N2	M	I	I
Bldg. 12-86	5	0.75	0.75	0.75	0.75	1	2	E2	H	F	F
Bldg. 11-38	5	0.75	1	0.75	0.75	1	2	E2	L	S	S
Bldg. 12-62	5	0.75	1	0.75	0.75	1	2	E2	L	S	S

Table 1 - SSO Staffing

	Determination of Facility Coverage Ranking Priority							Determination of SSO Coverage			
Facility or Groups of Facilities	Facility Hazard Value	Facility Size	Material Condition	Operations Complexity	Programmatic Importance	Operational Rigor	Coverage Ranking Priority	Facility Categorization	Facility Activity Level	Base Coverage Level	Adjusted Coverage Level
a	b	c	d	e	f	g	h	i	j	k	l
Bldg. 12-17	5	0.75	1	0.75	0.75	1	2	E4	M	O	O
2-104A Paint B	5	0.75	0.75	0.75	0.75	1	2	N2	L	O	O
Bldg. 11-20	5	0.75	1	0.75	0.75	1	2	E2	M	O	O
Bldg. 12-21	4	0.75	1	0.75	0.75	1	2	E2	L	S	S
Bldg. 12-63	4	0.75	1	0.75	0.75	1	2	E2	M	O	O
Bldg. 12-31	4	0.75	1	0.75	0.75	1	2	E2	M	O	O
Bldg. 11-50	3	0.75	1	0.75	0.75	1	1	E2	L	S	S
12-65/83	3	0.75	1	0.75	0.75	1	1	E2	L	S	S
12-104-A	3	0.75	0.75	0.75	0.75	1	1	E2	L	O	O
Bldg. 12-79	2	0.75	1	0.75	0.75	1	1	E3	L	S	S
Bldg. 11-15	2	0.75	1	0.75	0.75	1	1	E2	L	S	S
Bldg. 11-37	2	0.75	1	0.75	0.75	1	1	E2	L	S	S
Bldg. 12-19W	2	0.75	1	0.75	0.75	1	1	E2	L	O	O
Bldg. 12-26	2	0.75	1	0.75	0.75	1	1	E2	L	S	S
12-55/56	2	0.75	1	0.75	0.75	1	1	E2	L	S	S
Bldg. 12-42	1	0.75	1	0.75	0.75	1	0	N2	L	S	S
Bldg. 12-82	1	0.75	1	0.75	0.75	1	0	E3	M	S	S
HPFL	1	0.75	1	0.75	0.75	1	0	Safety Class	N/A	O	O
12-32/33	1	0.75	1	0.75	0.75	1	0	E4	L	S	S
Bldg. 12-44 Cell 8	0	0.75	1	0.75	0.75	1	0	N2	L	O	O
12-21	0	0.75	1	0.75	0.75	1	1	E2	M	O	O
12-53/52	0	0.75	1	0.75	0.75	1	0	E4	L	S	S
Total											

Table 2 - Facility Hazard Value

Facility or Groups of Facilities	Radiation Exposure			Criticality			Biological			Hazardous Chemicals			Lasers			Electricity			Cryogens			High Pressure			Hoisting & Rigging			Construction or D&D			Explosives			Fire			Facility Hazard Value
	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	
Bldg. 12-44	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	3	1	2	2	1	19
Bldg. 12-85	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	3	1	1	2	1	19
Bldg. 12-96	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	3	1	1	2	1	19
Bldg. 12-98	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	3	1	1	2	1	19
Bldg. 12-99	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	18
Bldg.12-104	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	18
Bldg. 12-84	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	18
Bldg. 12-44 Cell 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bldg. 12-64	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	2	1	13
Bldg. 12-50	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	14
Bldg. 12-60	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	14
Z-4 SNM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	2	1	2	2	2	15
Bldg. 12-121	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	1	2	1	9
Bldg. 11-51	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	10
Bldg. 12-116	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	1	9
Bldg. 11-55	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	8
Bldg. 12-19E	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	8
Bldg. 12-58	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	1	7
Bldg. 12-66	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	1	7
FS	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	1	2	1	10
Bldg. 12-86	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	5

Table 2 - Facility Hazard Value

Facility or Groups of Facilities	Radiation Exposure			Criticality			Biological			Hazardous Chemicals			Lasers			Electricity			Cryogens			High Pressure			Hoisting & Rigging			Construction or D&D			Explosives			Fire			Facility Hazard Value
	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	
BG	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	2	2	8
Bldg. 12-17	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	5
Bldg. 11-38	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	5
Bldg. 12-62	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	1	0	5
Bldg. 12-63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	1	0	4
Bldg. 12-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	1	0	4
Bldg. 12-21	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	4
Bldg. 11-20	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	5
Bldg. 11-50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	3
12-65/83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	3
12-104-A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3
Bldg. 12-79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2
Bldg. 11-15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Bldg. 11-37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Bldg. 12-19W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Bldg. 12-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
12-55/56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
12-32/33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Bldg. 12-82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
HPFL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bldg. 12-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 2 - Facility Hazard Value

Facility or Groups of Facilities	Radiation Exposure			Criticality			Biological			Hazardous Chemicals			Lasers			Electricity			Cryogens			High Pressure			Hoisting & Rigging			Constructio n or D&D			Explosives			Fire			Facility Hazard Value
	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	
12-53/52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-104A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	0	5
Bldg. 11-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	2	0	1	0	6

TABLE 3 - Safety System Adjustment Factor

System Type	System Size	System Complexity	Safety Classification	System Condition	SE Program Implementation	Safety System Adjustment Factor
Electrical Safety Systems						
Blast Door Interlocks	1.25	1	SC	1	1	1.25
Door Interlock System	1	1	SC	1	1	1.00
Lightning Detection & Warning	0.75	1	SC	1	1	0.75
Emergency Lighting	1	0.75	SS	1	1	0.75
RAMS*	1.25	1	VSS	1	1	1.25
UPS*	1	1	VSS	1	1	1.00
Thermal Monitoring*	0.75	1	VSS	1	1	0.75
RADSAFE*	0.75	1.25	VSS	1	1	0.94
Electrical Testers (SMP)	0.75	1.25	SMP	1	1	0.94
Mechanical Safety Systems						
Dynamic Balancer	0.75	1.25	SC	1	1	0.94
CWIV	1	0.75	SC	1	1	0.75
Task Exhaust	1.25	0.75	SC	1	1	0.94
Blast Valves	1	0.75	SC	1	1	0.75
Facility Crane Assembly	1.25	1	SC	1	1	1.25
Paint Booth Ventillation	0.75	0.75	SS	1	1	0.56
Fume Hood Ventillation	0.75	0.75	SS	1	1	0.56
Facility Structure*	1.25	1	VSS	1	1	1.25
Special Tooling (SMP)	1.25	1.25	SMP	1	1	1.56
Fire Protection Safety Systems						
Fire Suppression	1.25	1	SC	1	1	1.25
HPFL	1.25	0.75	SC	1.25	1	1.17
FACP*	1	1	VSS	1	1	1.00

* Denotes VSS

Table 4 - SSO Base Time Commitment

SO Programmatic and Collateral Activities for a Simple Safety Significant System in a low hazard facili

	Activity	Hrs/day	Hrs/week	Hrs/month	Hrs/quarter	Hrs/year	Total Hours	FTE
Fixed-Time Technical Activities	**Meetings/Interface/Coordination**							
	Attend meetings with Contractor SEs			4			48	0.02307692
	SSO Training/Requalification							
	SSO Requalification					20	20	0.00961538
	SSO Training					20	20	0.00961538
	SSO Reporting Activities							
	Reporting - Quarterly, V		0.5				26	0.0125
	Safety/Authorization Basis							
	Review DSA Mods/JCOs					32	32	0.01538462
	Contractor Procedure/Process Changes							
	Review Process/Procedure Changes						0	0
					Fixed-Time Technical Hours Subtotal		146	0.07019231
System-Dependent Activities	**Corrective Action Program (CAP)**							
	Review e	1					260	0.125
	Review CAP resolutions			1			12	0.00576923
	Follow-up/Closure of SSO Findings, I			1			12	0.00576923
	Performance Monitoring							
	Observe System Performance/Reliab			4			48	0.02307692
	Review System Health Reports/Perf Ind.				2		8	0.00384615
	Monitor Contractor SE Program			1			12	0.00576923
	Inspection/Condition Monitoring							
	Safety System Functional Assessment					320	320	0.15384615
					System-Dependent Time Subtotal		672	0.32307692
					Total BASE SSO Technical Time		**818**	**0.39**
Administrative Time	**Other Technical Assignments - Non-SSO**							
	Readiness Assessments (IIP)					0	0	0.00
	Special Assginments					40	40	0.02
	Collateral Assignments						0	0.00
	Technical Support to Other Federal S			2			24	0.01
	Administrative Duties & Activities							
	Time keeping		0.25				13	0.01
	Training Registration			1			12	0.01
	Travel						0	0.00
	Personnel Activities					4	4	0.00
	Medical Qualifications/Exams					3	3	0.00
	Document Reviews						0	0.00
	Mail & E-	0.5					130	0.06
	Staff Meetings		1	1			64	0.03
	Annual Leave		3				156	0.08
	Sick Leave					40	40	0.02
	Military Leave						0	0.00
	Training, GET					3	3	0.00
	Training, Rad Worker II					8	8	0.00
	Training, Hazwoper Refresher					8	8	0.00
	Training, Facility Access					4	4	0.00
	Training, Admin (EEO, Ethics, etc.)					12	12	0.01
	Other, Specify						0	0.00
	Overtime (0%)					0	0	0.00
					SSO Administrative Time		521	0.25

TABLE 5 - System Specific Adjusted Base SSO Hours

System Type	Safety System Adjustment Factor	SSO System Dependent Base Hours	Adjusted System Dependent SSO Hours/Year
Electrical Safety Systems			
Blast Door Interlocks	1.25	672	840
Door Interlock System	1.00	672	672
Lightning Detection & Warning	0.75	672	504
Emergency Lighting	0.75	672	504
RAMS*	1.25	672	840
UPS*	1.00	672	672
Thermal Monitoring*	0.75	672	504
RADSAFE*	0.94	672	630
Electrical Testers (SMP)	0.94	672	630
Mechanical Safety Systems			0
Dynamic Balancer	0.94	672	630
CWIV	0.75	672	504
Task Exhaust	0.94	672	630
Blast Valves	0.75	672	504
Facility Crane Assembly	1.25	672	840
Paint Booth Ventillation	0.56	672	378
Fume Hood Ventillation	0.56	672	378
Facility Structure*	1.25	672	840
Special Tooling (SMP)	1.56	672	1050
Fire Protection Safety Systems			0
Fire Suppression	1.25	672	840
HPFL	1.17	672	787.5
FACP*	1.00	672	672

TABLE 6 - Multiple System Assignment Factors

System Type	Adjusted System Dependent SSO Hours/Year	Fixed-Time Technical Hours/Year	Total SSO Technical Hours/Year (Note 1)	Total SSO Technical FTE
Electrical Safety Systems				
Blast Door Interlocks	840	146	3401	1.6
Door Interlock System	672	146		
Lightning Detection & Warning	504	146		
Emergency Lighting	504	146		
RAMS*	504	146		
UPS*	840	146		
Thermal Monitoring*	672	146		
RADSAFE*	504	146		
Electrical Testers (SMP)	630	146		
Mechanical Safety Systems				
Facility Crane Assembly	840	146	3443	1.7
Dynamic Balancer	630	146		
Task Exhaust	630	146		
CWIV	504	146		
Blast Valves	504	146		
Paint Booth Ventillation	378	146		
Fume Hood Ventillation	378	146		
Facility Structure*	840	146		
Special Tooling (SMP)	1050	146		
Fire Protection Safety Systems				
HPFL	787.5	146	1747.25	0.8
Fire Suppression	840	146		
FACP*	787.5	146		

Note 1: Total SSO hours/year = Fixed Time Technical hours
+ largest adjusted system dependent hours
+ 0.5*(System{2} dependent hours)
+ 0.5*(System{3} dependent hours)
+ . . . + 0.5*(System{N} dependent hours)

Table 7 - SSO Available Time for Coverage, Assignment-Specific Method

Enclosure 3

SSO	Staff	Total Available Hours	Collateral Duty Assignments	Hours	Admin. Time	Available Staff Time for SSO Coverage g=c-d-e		Needed SSO Coverage (from Table 6)	Needed SSO Personnel
a	b	c	d	e	f	g	h	i	j
Electrical Systems	SD	2080	Collateral Duty 1: LP Project; Indirect Effects Plan; ESD Plan; Facility Modifcations /Projects	120	677				
			Collateral Duty 2: SE Program Assessment; RA Participation	360					
			Collateral Duty 3: Support for BOP Electrical Systems	120					
	JT*	520			173				
		2600		600	850	1150	0.55	1.6	2.0
Mechanical Systems	TZ	2080	Collateral Duty 1: Seismic Project; Configuration Management Project; Facility Modifications /Projects	120	677				
			Collateral Duty 2: SE Program Assessment; RA Participation	360					
			Collateral Duty 3: Support for BOP Mechanical Systems	180					
	JT*	520			173				
		2600		660	850	1090	0.52	1.7	2.1
Fire Protection Systems	JL	2080	Collateral Duty 1 - Non-safety FP Systems; Facility Modifications /Projects	420	677				
			Collateral Duty 2: FP Program Assessment; RA Participation	360					
	JT*	520			173				
		2600		780	850	970	0.47	0.8	1.2

* Denotes allocated time for SSO Lead. Approximately1/3 for each type of system after administrative hours subtracted.

The undersigned have reviewed and approved this PXSO SSO staffing analysis.

Table 1 - Facility Hazard Value for "Other TQP" Functions

Facility or Groups of Facilities	Radiation Exposure			Criticality			Biological			Hazardous Chemicals			Lasers			Electricity			Cryogens			High Pressure			Hoisting & Rigging			Construction or D&D			Explosives			Fire			Facility Hazard Value
	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	
Bldg. 12-44	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	3	1	2	2	1	19
Bldg. 12-85	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	3	1	1	2	1	19
Bldg. 12-96	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	3	1	1	2	1	19
Bldg. 12-98	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	3	1	1	2	1	19
Bldg. 12-99	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	18
Bldg.12-104	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	18
Bldg. 12-84	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	18
Bldg. 12-44 Cell 8	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	1	1	2	1	15
Bldg. 12-64	1	2	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	2	1	13
Bldg. 12-50	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	14
Bldg. 12-60	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3	1	1	2	1	14
Z-4 SNM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	2	1	2	2	2	15
Bldg. 12-121	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	1	2	1	9
Bldg. 11-51	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	9
Bldg. 12-116	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	1	9
Bldg. 11-55	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	8
Bldg. 12-19E	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	8
Bldg. 12-58	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	1	7
Bldg. 12-66	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	1	7
FS	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	7
Bldg. 12-86	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	5

Table 1 - Facility Hazard Value for "Other TQP" Functions

Facility or Groups of Facilities	Radiation Exposure			Criticality			Biological			Hazardous Chemicals			Lasers			Electricity			Cryogens			High Pressure			Hoisting & Rigging			Construction or D&D			Explosives			Fire			Facility Hazard Value
	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	
BG	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	5
Bldg. 12-17	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	5
Bldg. 11-38	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	5
Bldg. 12-62	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	1	0	5
Bldg. 12-63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	1	0	4
Bldg. 12-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	1	0	4
Bldg. 12-21	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	4
Bldg. 11-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	3
Bldg. 11-50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3
12-65/83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	3
12-104-A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3
Bldg. 12-79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2
Bldg. 12-19W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Bldg 12-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
HPFL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bldg 11-15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Bldg 11-37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Bldg 12-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
12-55/56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Bldg 12-82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Bldg. 12-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 1 - Facility Hazard Value for "Other TQP" Functions

Facility or Groups of Facilities	Radiation Exposure			Criticality			Biological			Hazardous Chemicals			Lasers			Electricity			Cryogens			High Pressure			Hoisting & Rigging			Constructio n or D&D			Explosives			Fire			Facility Hazard Value
	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	public	worker	environment	
Bal. of Plant	0	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	7

Table 2 - Determination of Facility SME Coverage Priority for "Other TQP" Functions

	Table 2: Determination of Facility Coverage Ranking Priority							
Facility or Groups of Facilities	Facility Hazard Value	Facility Size	Material Condition	Operations Complexity	Programmatic Importance	Operational Rigor	Coverage Ranking Priority	Facility Type
a	b	c	d	e	f	g	h	
Bldg. 12-44	19	0.75	1	0.75	0.75	1	8	Cell
Bldg. 12-84	18	0.75	1	0.75	0.75	1	8	Bay
Bldg. 12-44 Cell 8	15	0.75	1	0.75	0.75	1	6	NM
Z-4 SNM	15	1	1	0.75	0.75	1	8	NM
Bldg. 12-64	14	0.75	1	0.75	0.75	1	6	NM
Bldg. 12-50	14	0.75	1	0.75	0.75	1	6	Bay
Bldg. 12-60	14	0.75	1	0.75	0.75	1	6	Bay
Bldg. 12-85	19	0.75	0.75	0.75	0.75	1	6	Cell
Bldg. 12-96	19	0.75	0.75	0.75	0.75	1	6	Cell
Bldg. 12-98	19	0.75	0.75	0.75	0.75	1	6	Cell
Bldg. 12-99	18	0.75	0.75	0.75	0.75	1	6	Bay
Bldg.12-104	18	0.75	0.75	0.75	0.75	1	6	Bay
Bldg. 11-51	9	0.75	1	0.75	0.75	1	4	HE
Bal of Plant	7	1	1	0.75	0.75	1	4	
Bldg. 11-55	8	0.75	1	0.75	0.75	1	3	HE
Bldg. 12-19E	8	0.75	1	0.75	0.75	1	3	HE
Bldg. 12-58	7	0.75	1	0.75	0.75	1	3	NM
Bldg. 12-66	7	0.75	1	0.75	0.75	1	3	HE
FS	7	0.75	1	0.75	0.75	1	3	HE
Bldg. 12-121	9	0.75	0.75	0.75	0.75	1	3	HE
Bldg. 12-116	8	0.75	0.75	0.75	0.75	1	3	NM
Bldg. 11-38	5	0.75	1	0.75	0.75	1	2	HE
Bldg. 12-62	5	0.75	1	0.75	0.75	1	2	HE

Table 2 - Determination of Facility SME Coverage Priority for "Other TQP" Functions

	Table 2: Determination of Facility Coverage Ranking Priority							
Facility or Groups of Facilities	Facility Hazard Value	Facility Size	Material Condition	Operations Complexity	Programmatic Importance	Operational Rigor	Coverage Ranking Priority	Facility Type
a	b	c	d	e	f	g	h	
BG	5	0.75	1	0.75	0.75	1	2	HE
Bldg. 12-17	5	0.75	1	0.75	0.75	1	2	HE
Bldg. 12-86	5	0.75	0.75	0.75	0.75	1	2	NM
Bldg. 12-21	4	0.75	1	0.75	0.75	1	2	HE
Bldg. 12-63	4	0.75	1	0.75	0.75	1	2	HE
Bldg. 12-31	4	0.75	1	0.75	0.75	1	2	HE
Bldg 11-15	2	0.75	1	0.75	0.75	1	1	HE
Bldg 11-37	2	0.75	1	0.75	0.75	1	1	HE
Bldg 12-26	2	0.75	1	0.75	0.75	1	1	HE
12-55/56	2	0.75	1	0.75	0.75	1	1	HE
Bldg 12-82	1	0.75	1	0.75	0.75	1	1	HE
Bldg. 11-20	3	0.75	1	0.75	0.75	1	1	HE
Bldg. 11-50	3	0.75	1	0.75	0.75	1	1	HE
12-65/83	3	0.75	1	0.75	0.75	1	1	HE
12-104-A	3	0.75	0.75	0.75	0.75	1	1	Bay
Bldg. 12-79	2	0.75	1	0.75	0.75	1	1	HE
Bldg. 12-19W	2	0.75	1	0.75	0.75	1	1	HE
Bldg. 12-42	1	0.75	1	0.75	0.75	1	0	NM
HPFL	1	0.75	1	0.75	0.75	1	0	
Bldg 12-33	1	0.75	1	0.75	0.75	1	0	HE

Table 3 - FTE's for Technical Capabilites							
	Hazard Rank (highest left, lowest right)						
Technical Capability	**NE Operations in Cells**	**NE Operations in Bays**	**NM Operations**	**HE Operations**	**Balance of Plant**	**Total TQP FTE's Needed**	**Total TQP FTE's On-board**
Senior Technical Safety Manager	Note 1	Note 1	Note 1	Note 1	Note 1	6	6
Facility Representative	Note 2	Note 2	Note 2	Note 2	Note 2	10	7
Safety System Oversight	Note 3	Note 3	Note 3	Note 3	Note 3	5	4
Civil/structural Engineering	Note 4	Note 4	Note 4	Note 4	Note 4	Note 4	Note 4
Criticality Safety	0.03	0.03	0.03	N/A	N/A	0.1	Note 5
Electrical Systems	Note 4	Note 4	Note 4	Note 4	Note 4	Note 4	Note 4
Environmental Compliance	Note 6	Note 6	Note 6	Note 6	Note 6	N/A	Note 6
Environmental Restoration	Note 6	Note 6	Note 6	Note 6	Note 6	N/A	Note 6
Facility Maintenance Management	Note 4	Note 4	Note 4	Note 6	Note 6	N/A	Notes 4&6
Fire Protection Engineering	Note 4	Note 4	Note 4	Note 4	Note 4	Note 4	Note 4
Industrial Hygiene	0.2	0.2	0.2	0.2	0.2	1	1
Instrumentation and Control	Note 4	Note 4	Note 4	Note 4	Note 4	Note 4	Note 4
Mechanical Systems	Note 4	Note 4	Note 4	Note 4	Note 4	Note 4	Note 4
Nuclear Explosives Safety	1	1	N/A	N/A	N/A	2	2
Nuclear Safety Specialist	3	3	2	N/A	N/A	8	5
Occupational Safety	0.3	0.3	0.3	0.3	0.85	2	1
Quality Assurance	2.5	2.5	0.25	0.25	0.5	6	6
Radiation Protection	0.3	0.3	0.3	N/A	N/A	1	1
Safeguards and Security	Note 6	Note 6	Note 6	Note 6	Note 6	Note 6	Note 6
Safety Software Quality Assurance	0.05	0.05	0.05	0.05	N/A	0.2	Note 5
Technical Program Manager	5	5	1	1	0	12	11
Technical Training	0.3	0.3	0.3	0.1	N/A	1	0
Transportation and Traffic Management	0.25	0.25	0.25	0.25	N/A	1	1
Waste Management	Note 6	Note 6	Note 6	Note 6	Note 6	Note 6	Note 6

Note 1: FTE requirements are estimated by the process to determine STSM staffing which is provided separately.

Note 2: FTE requirements are estimated by the process to determine FR staffing which is provided separately

Note 3: FTE requirements are estimated by the process to determine SSO personnel which is provided separately.

Note 4: This function is provided by through the SSO program and estimated by that process which is provided separately.

Note 5: This function is provided through the nuclear safety specialist staff, one each FTE is also qualified to the the crit. safety & SQA TQP standard.

Note 6: These personnel are qualified separately and are not part of the TQP.